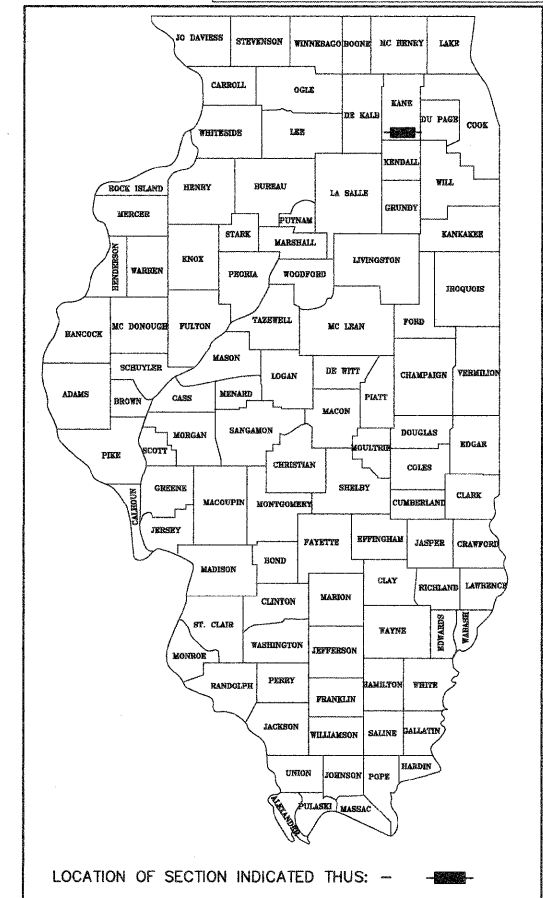


FOR INDEX OF SHEETS, SEE SHEET NO.2

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANS FOR PROPOSED FEDERAL AID PROJECT

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3898	10-00024-00-RS	KANE	13	1
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT - LAPP		
CONTRACT NO. 63499				



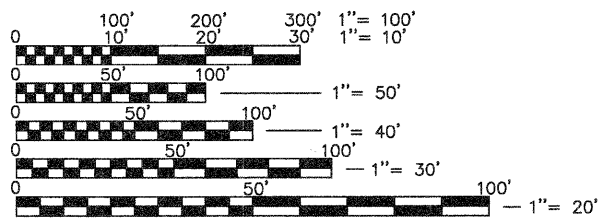
**FAU 3898 (GRANART ROAD)  
FROM WHILDIN ROAD  
TO FAU 2312 (DUGAN ROAD)  
LAPP RESURFACING  
PROJECT NO. ARA-9003 (666)  
SECTION NO. 10-00024-00-RS  
VILLAGE OF SUGAR GROVE  
KANE COUNTY  
JOB NO. C-91-672-10**

PROJECT LOCATED IN THE VILLAGE OF SUGAR GROVE

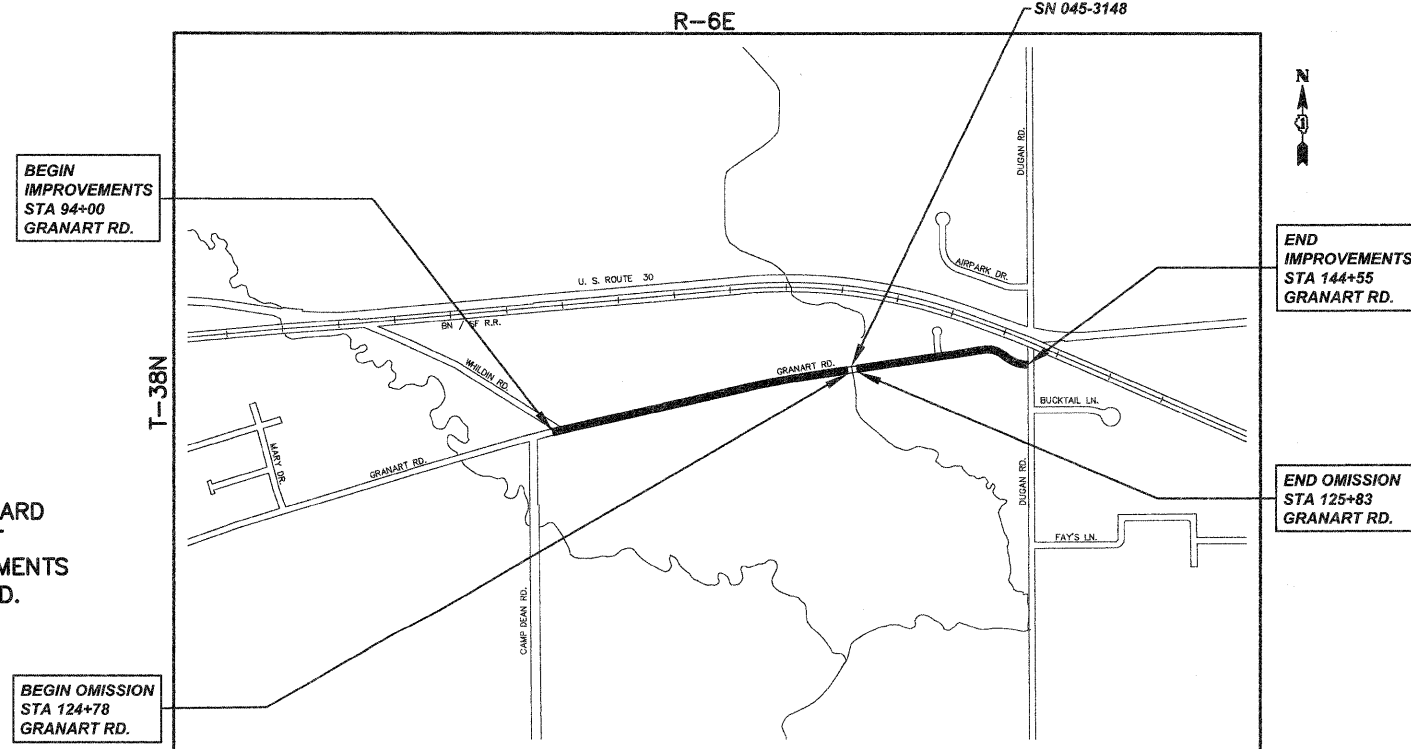
**DESIGN DESIGNATION**

GRANART ROAD: COLLECTOR (URBAN)  
DESIGN SPEED = 45 M.P.H.  
POSTED SPEED = 45 M.P.H.  
ADT = 3300 VPD (2006)

FIELD ENGINEER: MARILYN SOLOMON (847) 705-4407  
CONSULTING ENGINEER: ENGINEERING ENTERPRISES, INC.  
CONTACT: TIMOTHY V. WEIDNER (630)-466-6700



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.



NW & NE 1/4 SEC. 24, T-38N, R-6E, 3RD PM, BIG ROCK TOWNSHIP

**LOCATION MAP**  
N.T.S.

GROSS LENGTH OF PROJECT = 5,055 FEET (0.96 MILES)  
NET LENGTH OF PROJECT = 4,950 FEET (0.94 MILES)

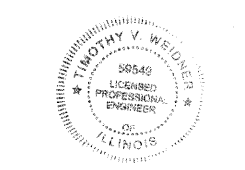
**JULIE JOINT UTILITY**  
LOCATION INFORMATION FOR EXCAVATION  
CALL 811

Know what's below.  
Call before you dig.

**CONTRACT 63499**

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	
APPROVED _____	June 9, 2010
DIRECTOR OF PUBLIC WORKS, VILLAGE OF SUGAR GROVE	
PASSED _____	July 12, 2010
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS	
RELEASING FOR BID BASED ON LIMITED REVIEW _____	July 17, 2010
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER	

DATE: June 9, 2010  
BY: Timothy V. Weidner  
TIMOTHY V. WEIDNER  
LICENSE EXPIRES: NOVEMBER 30, 2011



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CONSULTING ENGINEERS  
52 Wheeler Road  
Sugar Grove, Illinois 60554  
P: 630.466.6700 — W: www.eeiweb.com

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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3688	10-00024-00-RS	KANE	13	2
CONTRACT NO. 63499				

**GENERAL NOTES**

- STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JAN. 1, 2007, SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIFICATIONS AND PROVISIONS ADOPTED JAN. 1, 2010, AND REVISIONS THERETO, THESE IMPROVEMENT PLANS, DETAILS, SPECIAL PROVISIONS, CODES AND ORDINANCES OF THE VILLAGE OF SUGAR GROVE, ILLINOIS SHALL GOVERN APPLICABLE PORTIONS OF THIS PROJECT.
- SPECIAL ATTENTION IS CALLED TO THE FOLLOWING ARTICLES IN THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION:  
 ARTICLE 105.06 – COOPERATION BY CONTRACTOR  
 ARTICLE 105.07 – COOPERATION WITH UTILITIES  
 ARTICLE 107.14 – MAINTENANCE OF TRAFFIC  
 ARTICLE 107.15 – DIRT ON PAVEMENT OR STRUCTURES  
 ARTICLE 107.25 – PROTECTION AND RESTORATION OF TRAFFIC SIGNS  
 ARTICLE 107.31 – CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES  
 ARTICLE 406.06 (e) ¶2 – PLACING HMA WITHIN 200 FEET OF A BRIDGE ABUTMENT.  
 ARTICLE 701.04 – WORK ZONE TRAFFIC CONTROL AND PROTECTION: GENERAL  
 ARTICLE 701.07 – WORK ZONE TRAFFIC CONTROL AND PROTECTION: DROP-OFFS  
 ARTICLE 701.17 – WORK ZONE TRAFFIC CONTROL AND PROTECTION: SPECIFIC CONSTRUCTION OPERATIONS
- LOCATIONS OF UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY AND ARE NOT NECESSARILY COMPLETE. EXISTING AND PUBLIC UTILITIES ARE SHOWN ON THE PLANS, ACCORDING TO INFORMATION OBTAINED FROM UTILITY COMPANIES, MUNICIPALITIES AND SURVEYS.
- THE CONTRACTOR SHALL PROTECT AND PRESERVE ALL SECTION OR SUBSECTION SURVEY MONUMENTS OR PROPERTY OR REFERENCE MARKERS UNTIL THE OWNER, HIS/HER AGENT OR AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.
- ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM.
- THE CONTRACT UNIT PRICE FOR ALL REMOVAL PAY ITEMS SHALL INCLUDE ANY REQUIRED SAW CUTS.
- CONTRACTOR SHALL PROVIDE AND INSTALL A MINIMUM OF TWO WEIGHTED SAND BAGS ON EACH TYPE I OR TYPE II BARRICADE USED (ONE WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL). THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE TRAFFIC CONTROL AND PROTECTION ITEMS.
- BEFORE STARTING ALL EXCAVATIONS, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 811 FOR FIELD LOCATIONS OF BURIED UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED)
- UNLESS OTHERWISE SPECIFIED, BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE THE RESURFACING MEETS EXISTING PAVEMENT) IN ACCORDANCE WITH THE 'BUTT JOINT AND HMA TAPER DETAILS' SHEET INCLUDED IN THE PLANS.
- IN ACCORDANCE WITH ARTICLE 107.15, WHENEVER CONSTRUCTION DEBRIS OR LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS.
- IF, DURING CONSTRUCTION, THE CONTRACTOR ENCOUNTERS OR OTHERWISE BECOMES AWARE OF ANY SEWER, UNDER DRAINS OR FIELD DRAINS WITHIN THE RIGHT-OF-WAY, OTHER THAN THOSE SHOWN ON THE PLANS, HE/SHE SHALL INFORM THE ENGINEER, WHO SHALL DIRECT THE WORK NECESSARY TO MAINTAIN OR TO REPLACE THE FACILITIES IN SERVICE AND TO PROTECT THEM FROM DAMAGE. EXISTING FACILITIES TO BE MAINTAINED THAT ARE DAMAGED BECAUSE OF NON-COMPLIANCE WITH THIS PROVISION SHALL BE REPLACED AT THE CONTRACTORS OWN EXPENSE.
- THE RESIDENT ENGINEER SHALL CONTACT THE IDOT DISTRICT 1 TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TRAFFIC CONTROL DEVICES.
- ALL WORK PERFORMED RELATIVE TO THIS IMPROVEMENT SHALL COMPLY WITH ALL APPLICABLE RULES AND REGULATIONS OF O.S.H.A.
- AT GRAVEL DRIVEWAYS, THE AGGREGATE SHOULDER SHALL EXTEND A MINIMUM OF 10 FEET BEYOND THE EDGE OF PAVEMENT, OR AS OTHERWISE DIRECTED BY THE ENGINEER AND SHALL BE INCLUDED IN THE COST OF AGGREGATE WEDGE SHOULDERS, TYPE B.
- GRANART ROAD SHALL BE OPEN TO TRAFFIC AT ALL TIMES. WHEN IT IS NECESSARY TO CLOSE ONE LANE OF TRAFFIC DUE TO CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE LANE OF TRAFFIC DURING CONSTRUCTION HOURS WITH THE USE OF SIGNS AND FLAGGERS AS SHOWN IN THE TRAFFIC CONTROL STANDARDS. DURING NON-WORK HOURS, ALL LANES SHALL BE OPEN TO TRAFFIC.

**INDEX OF SHEETS**

- | SHEET NO. | SHEET DESCRIPTION                                   |
|-----------|---|
| 1.        | COVER SHEET AND LOCATION MAP                        |
| 2.        | GENERAL NOTES, STATE STANDARDS, AND INDEX OF SHEETS |
| 3.        | SUMMARY OF QUANTITIES                               |
| 4.        | TYPICAL EXISTING SECTIONS                           |
| 5.        | TYPICAL PROPOSED SECTIONS                           |
| 6.        | PLAN, CONSTRUCTION NOTES, AND DETAILS               |
| 7.        | PLAN, CONSTRUCTION NOTES, AND DETAILS               |
| 8.        | PLAN, CONSTRUCTION NOTES, AND DETAILS               |
| 9.        | PLAN, CONSTRUCTION NOTES, AND DETAILS               |

**DISTRICT ONE DETAILS**

- (TC-10) TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
- (TC-13) DISTRICT ONE – TYPICAL PAVEMENT MARKINGS
- (BD-22) PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
- (BD-32) BUTT JOINT AND HMA TAPER DETAILS

**STATE STANDARDS**

STD. NO.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
406201-01	MAILBOX TURNOUT
442201-03	CLASS C AND D PATCHES
701201-03	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH.
701306-02	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701901-01	TRAFFIC CONTROL DEVICES
780001-02	TYPICAL PAVEMENT MARKINGS

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**VILLAGE OF SUGAR GROVE**  
 KANE COUNTY, ILLINOIS

NO.	DATE	REVISIONS

**GRANART ROAD  
 LAPP IMPROVEMENTS**

**GENERAL NOTES, STATE  
 STANDARDS, AND INDEX  
 OF SHEETS**

DATE:	JUNE 2010
PROJECT NO:	SG1012
FILE:	SG1012-CVR
SHEET	<b>2</b> OF <b>13</b>

Plotted: June 8, 2010 @ 4:23 PM By: Larry Nolan - Tab: 02 Notes - 22x34

Path: H:\SUGARPROJ\SG0307\DWG\SG1012\DWG\_FINAL\_ENG\_SG1012-CVR

**SUMMARY OF QUANTITIES**

F.A.U. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3898	10-00024-00-RS	KANE	13	3
CONTRACT NO. 63499				

			CONST. CODE 1000
CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1,323
40600300	AGGREGATE (PRIME COAT)	TON	28
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	743
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	553
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	1,112
44201725	CLASS D PATCHES, TYPE I, 7 INCH	SQ YD	4
44201729	CLASS D PATCHES, TYPE II, 7 INCH	SQ YD	14
44201733	CLASS D PATCHES, TYPE III, 7 INCH	SQ YD	23
44201735	CLASS D PATCHES, TYPE IV, 7 INCH	SQ YD	454
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	495
67100100	MOBILIZATION	L SUM	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	2
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	1,500
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	500
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	19,250
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	14
Δ * XX008398	ASPHALT REJUVENATING AGENT	GALLON	1,325
Δ * Z0010619	HOT IN-PLACE RECYCLING	SQ YD	13,226

Δ SEE SPECIAL PROVISIONS  
\* SPECIALTY ITEMS

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KANE COUNTY, ILLINOIS

NO.	DATE	REVISIONS

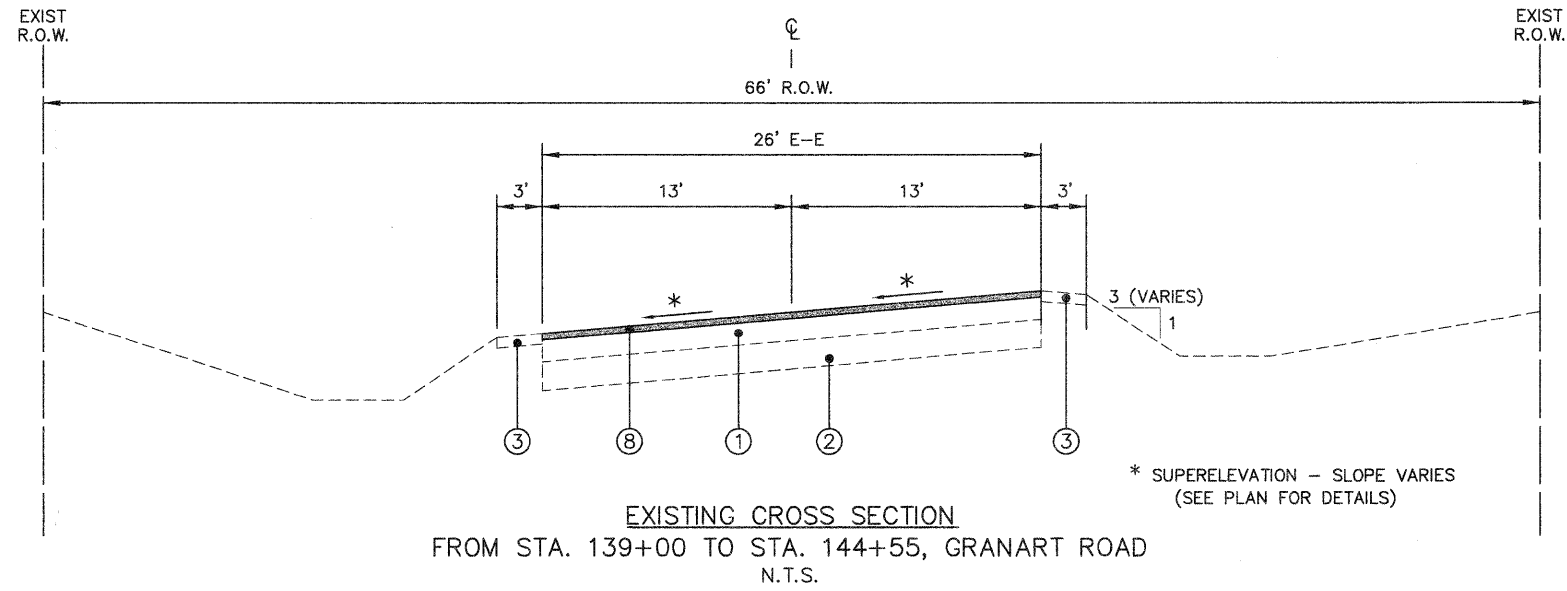
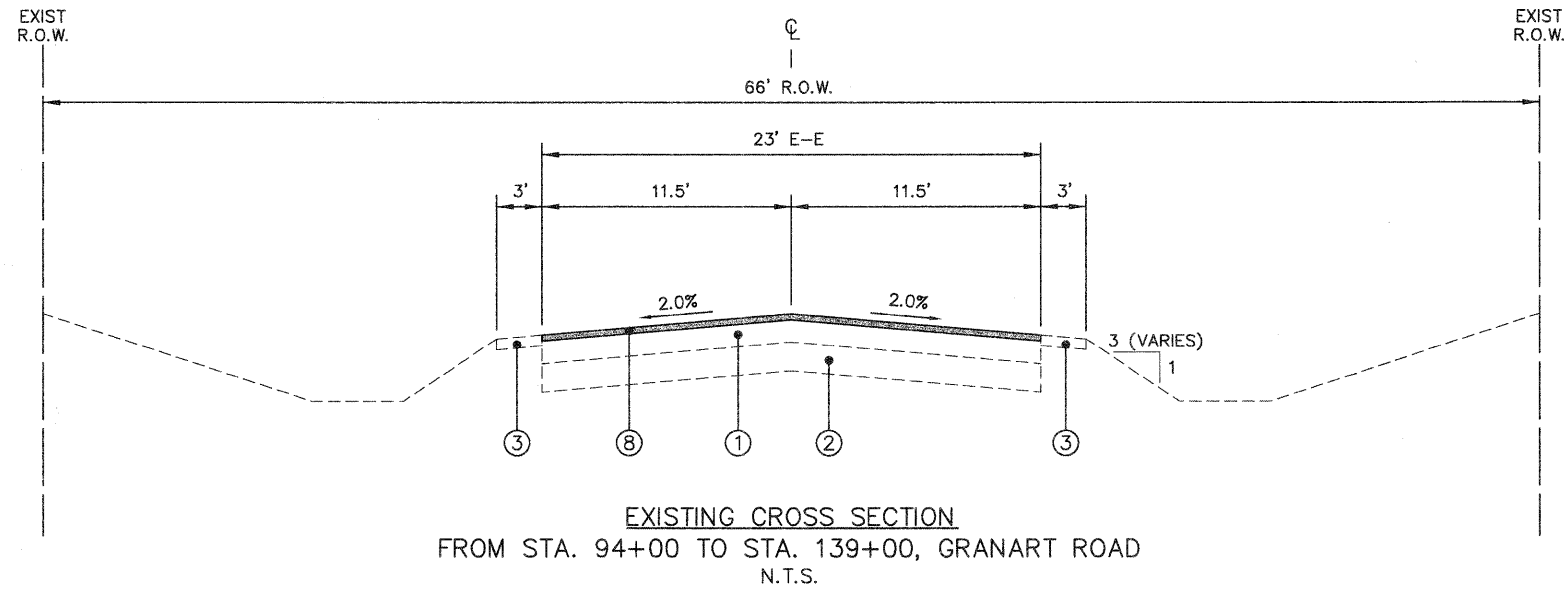
**GRANART ROAD**  
**LAPP IMPROVEMENTS**

**SUMMARY OF QUANTITIES**

DATE:	JUNE 2010
PROJECT NO:	SG1012
FILE:	SG1012-CVR
SHEET	<b>3</b> OF <b>13</b>

Path: H:\S05\PROJ\SG0307\DWG\SG1012\DWG\_FINAL\_ENG\_SG1012-CVR

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3898	10-00024-00-RS	KANE	13	4
CONTRACT NO. 63499				



**LEGEND**

①	EXISTING 7" & VARIES ASPHALT PAVEMENT
②	EXISTING 7" & VARIES AGGREGATE BASE
③	EXISTING 3' AGGREGATE SHOULDER
④	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50, 1.5"
⑤	LEVELING BINDER (MACHINE METHOD), N50, 1"
⑥	BITUMINOUS MATERIALS (PRIME COAT) AND AGGREGATE (PRIME COAT)
⑦	AGGREGATE WEDGE SHOULDER, TYPE B
⑧	HOT IN-PLACE RECYCLING

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**VILLAGE OF SUGAR GROVE**  
KANE COUNTY, ILLINOIS

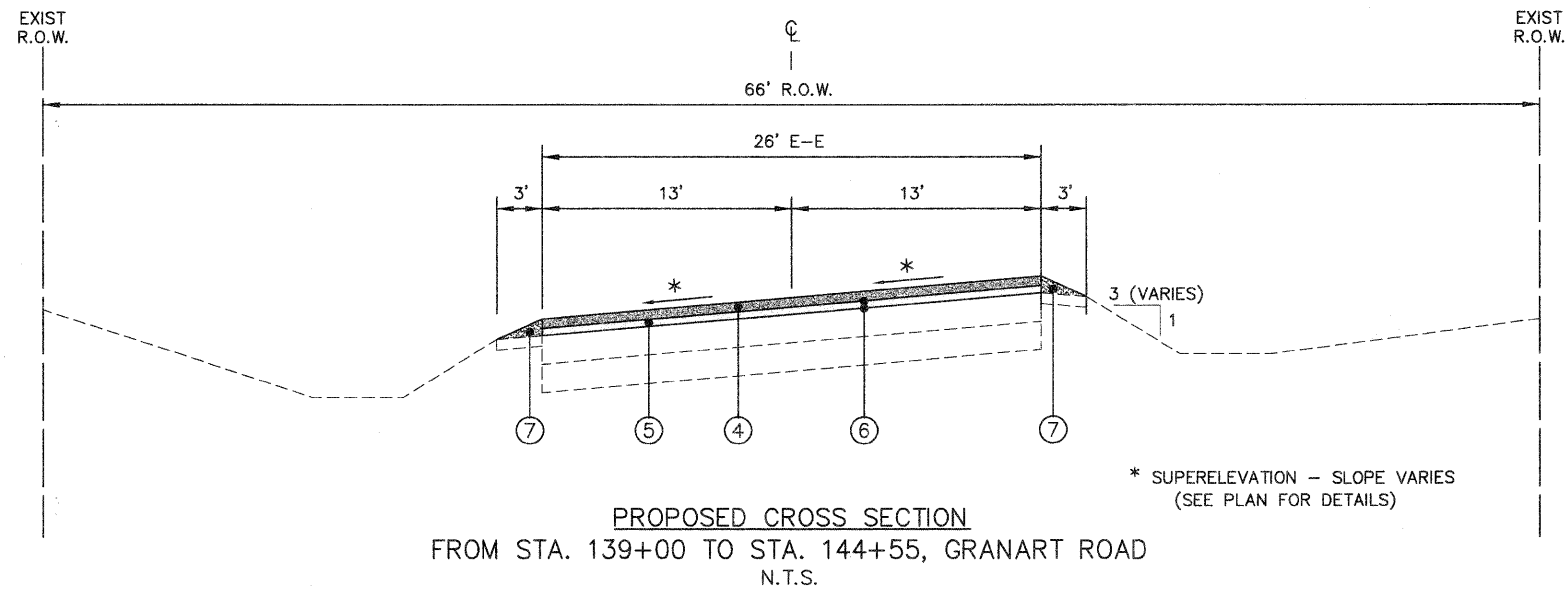
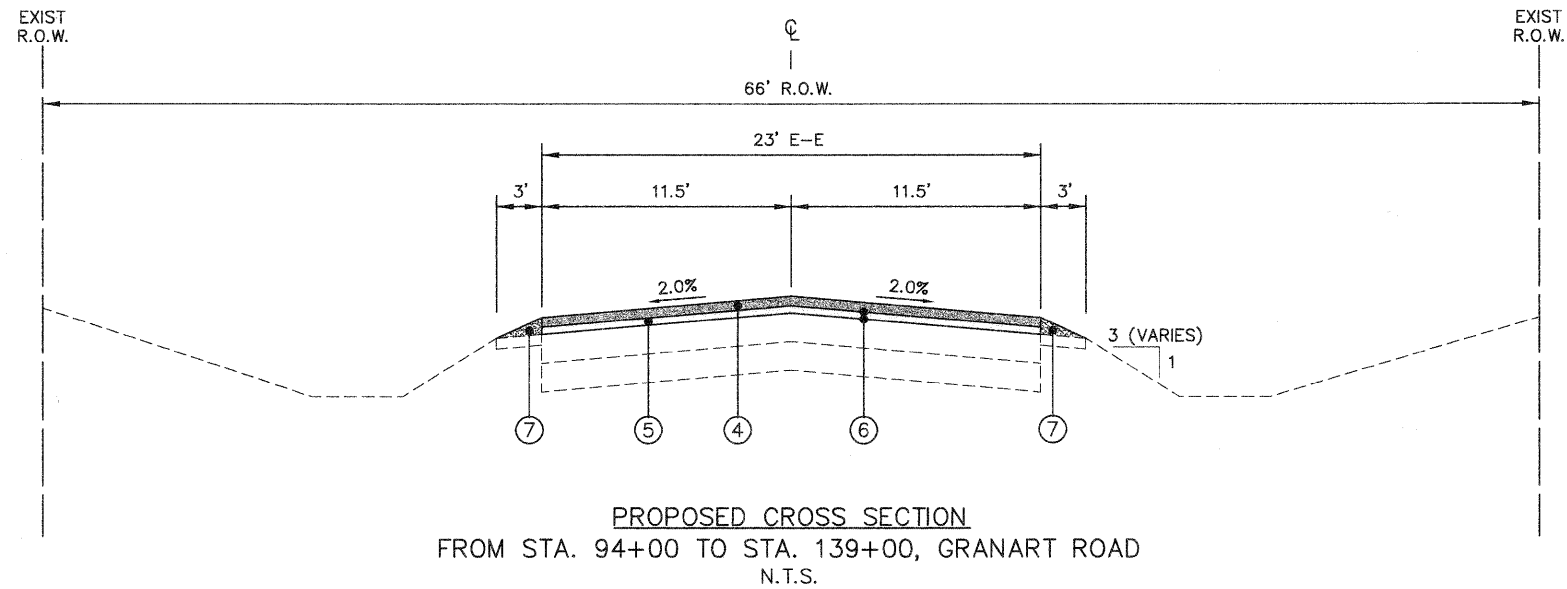
NO.	DATE	REVISIONS

**GRANART ROAD**  
**LAPP IMPROVEMENTS**

**TYPICAL EXISTING**  
**SECTIONS**

DATE:	JUNE 2010
PROJECT NO:	SG1012
FILE:	SG1012-CVR
SHEET	<b>4</b> OF <b>13</b>

Path: H:\SIS\KPRCA\SG0307\DWG\SG1012\DWG\_FINAL\_ENG\SG1012-CVR



LEGEND	
①	EXISTING 7" & VARIES ASPHALT PAVEMENT
②	EXISTING 7" & VARIES AGGREGATE BASE
③	EXISTING 3' AGGREGATE SHOULDER
④	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50, 1.5"
⑤	LEVELING BINDER (MACHINE METHOD), N50, 1"
⑥	BITUMINOUS MATERIALS (PRIME COAT) AND AGGREGATE (PRIME COAT)
⑦	AGGREGATE WEDGE SHOULDER, TYPE B
⑧	HOT IN-PLACE RECYCLING

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
OPERATION	MIXTURE TYPE	AIR VOIDS @ Ndes
RESURFACING	LEVELING BINDER (MACHINE METHOD), N50, 1"	4% @ 50 Gyr.
	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 (IL-9.5 MM), 1.5"	4% @ 50 Gyr.
PATCHING	CLASS D PATCHES (HMA BINDER IL-19 MM), 7"	4% @ 70 Gyr.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

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VILLAGE OF SUGAR GROVE  
KANE COUNTY, ILLINOIS

NO.	DATE	REVISIONS

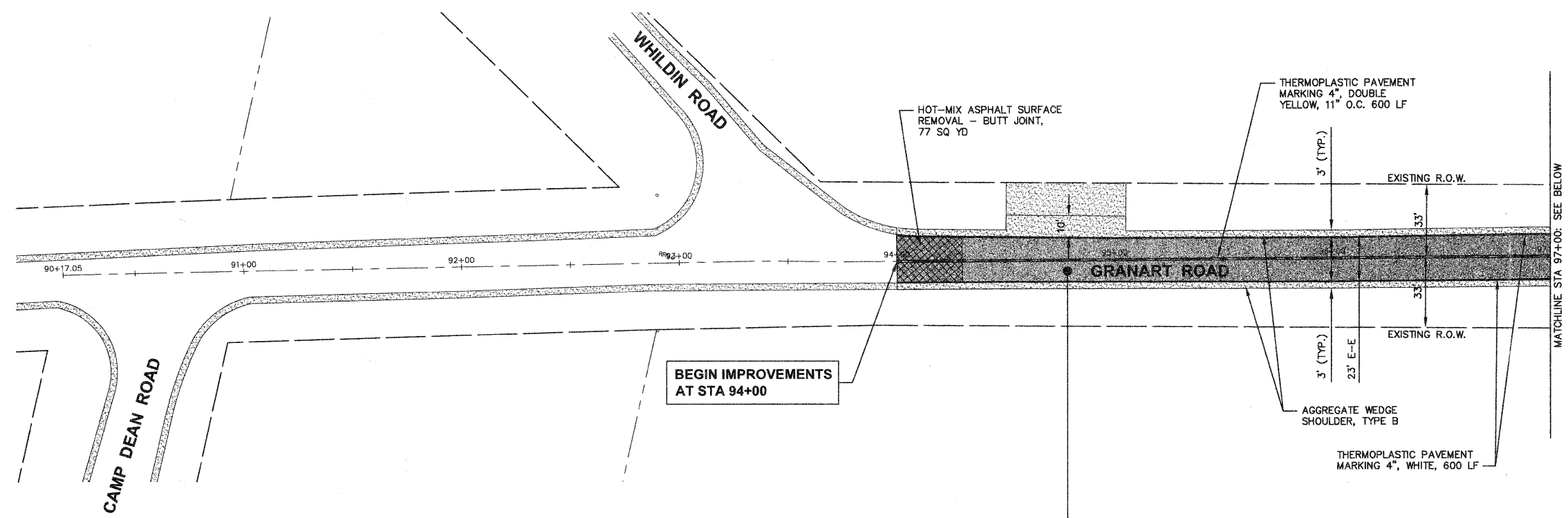
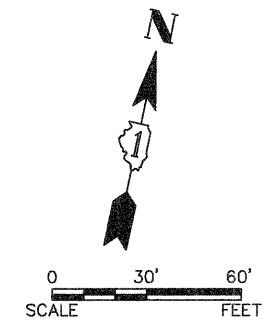
GRANART ROAD  
LAPP IMPROVEMENTS

TYPICAL PROPOSED  
SECTIONS

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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3898	10-00024-00-RS	KANE	13	6
CONTRACT NO. 63499				

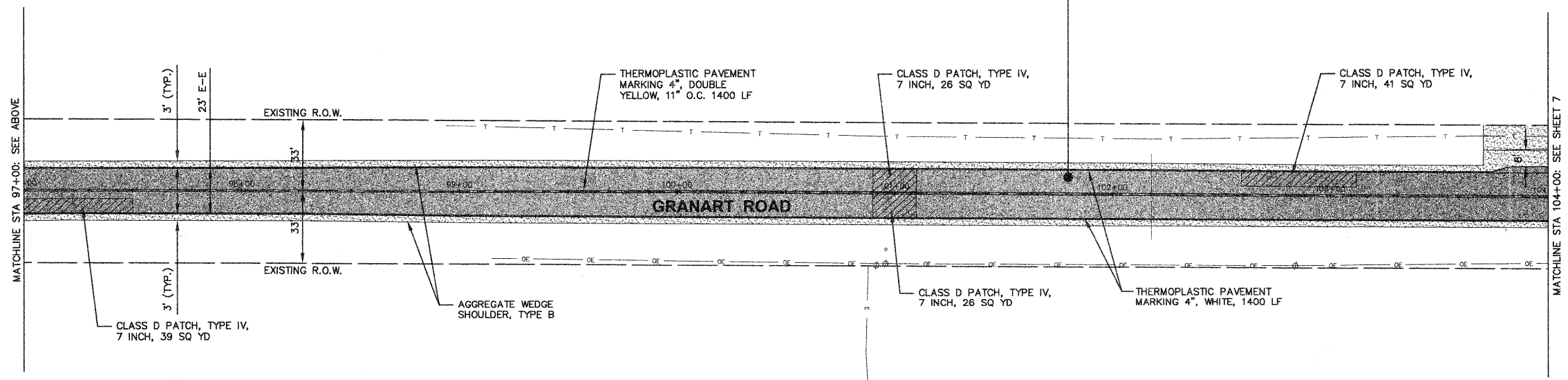


**BEGIN IMPROVEMENTS  
AT STA 94+00**

**LEGEND**

- HOT-MIX ASPHALT OVERLAY
- CLASS D PATCHES
- HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
- AGGREGATE WEDGE SHOULDER, TYPE B
- EXISTING GRAVEL DRIVEWAY

- HOT IN-PLACE RECYCLING, 2450 SQ YD
- BITUMINOUS MATERIALS (PRIME COAT), 245 GALLON
- AGGREGATE (PRIME COAT), 5 TONS
- LEVELING BINDER (MACHINE METHOD), N50, 1", 138 TONS
- HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50, 1.5", 206 TONS
- AGGREGATE WEDGE SHOULDER, TYPE B, 100 TON



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**VILLAGE OF SUGAR GROVE**  
 KANE COUNTY, ILLINOIS

NO.	DATE	REVISIONS

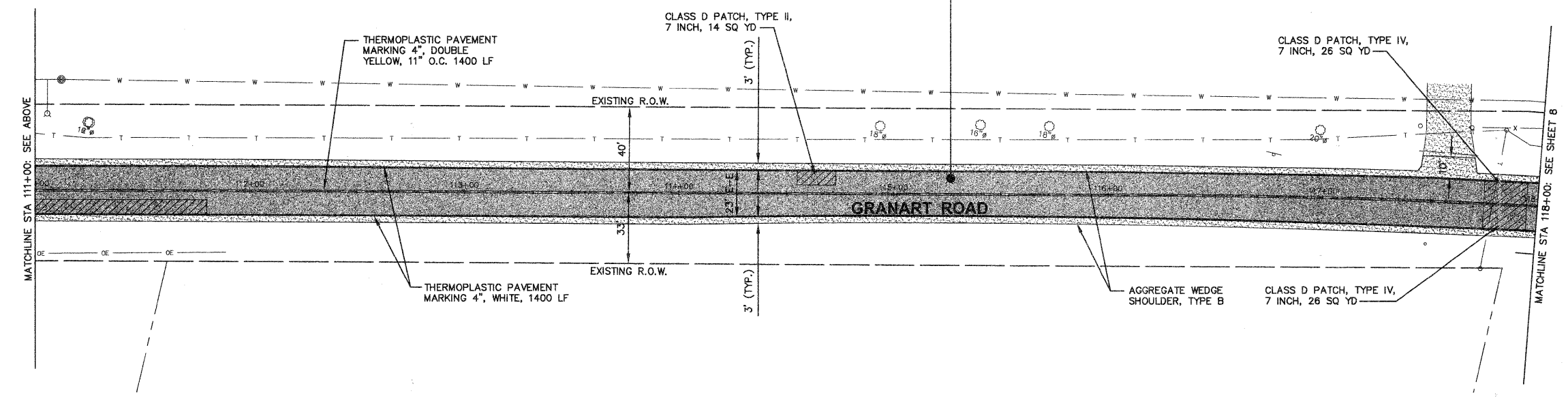
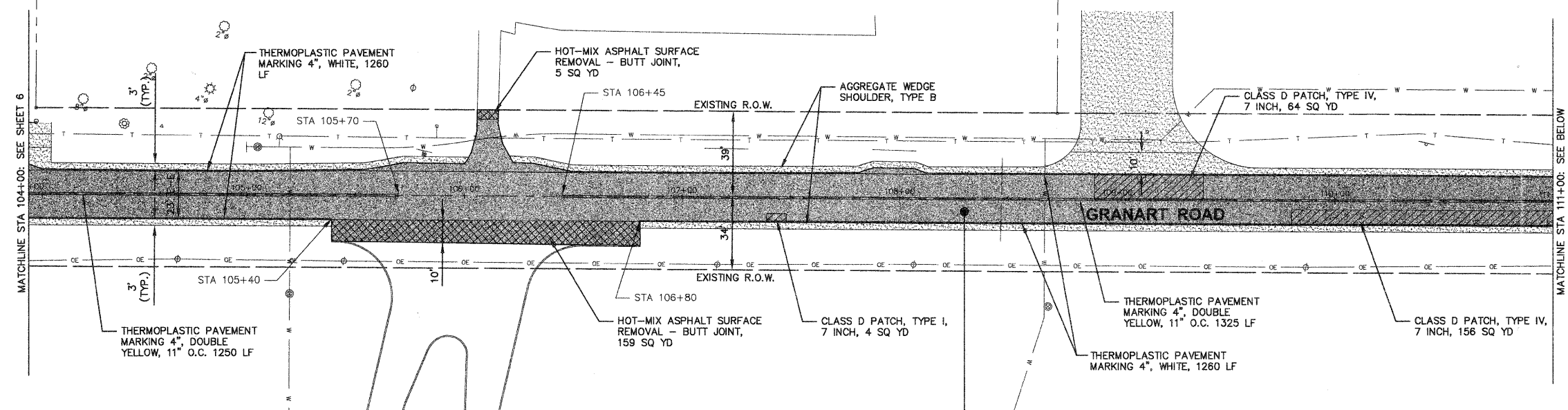
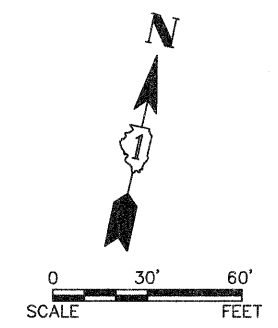
**GRANART ROAD**  
**LAPP IMPROVEMENTS**

**PLAN, CONSTRUCTION**  
**NOTES, AND DETAILS**

DATE:	JUNE 2010
PROJECT NO:	SG1012
FILE:	SG1012-PLAN
SHEET	<b>6</b> OF <b>13</b>

Path: H:\S05KPROJ\SG0307\DWG\SG1012\DWG\_FINAL\_ENG\_SG1012-PLAN

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3898	10-00024-00-RS	KANE	13	7
CONTRACT NO. 63499				



- HOT IN-PLACE RECYCLING, 3760 SQ YD
- BITUMINOUS MATERIALS (PRIME COAT), 376 GALLON
- AGGREGATE (PRIME COAT), 8 TONS
- LEVELING BINDER (MACHINE METHOD), N50, 1", 211 TONS
- HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50, 1.5", 316 TONS
- AGGREGATE WEDGE SHOULDER, TYPE B, 140 TON

**LEGEND**

- HOT-MIX ASPHALT OVERLAY
- CLASS D PATCHES
- HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
- AGGREGATE WEDGE SHOULDER, TYPE B
- EXISTING GRAVEL DRIVEWAY

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**VILLAGE OF SUGAR GROVE**  
 KANE COUNTY, ILLINOIS

NO.	DATE	REVISIONS

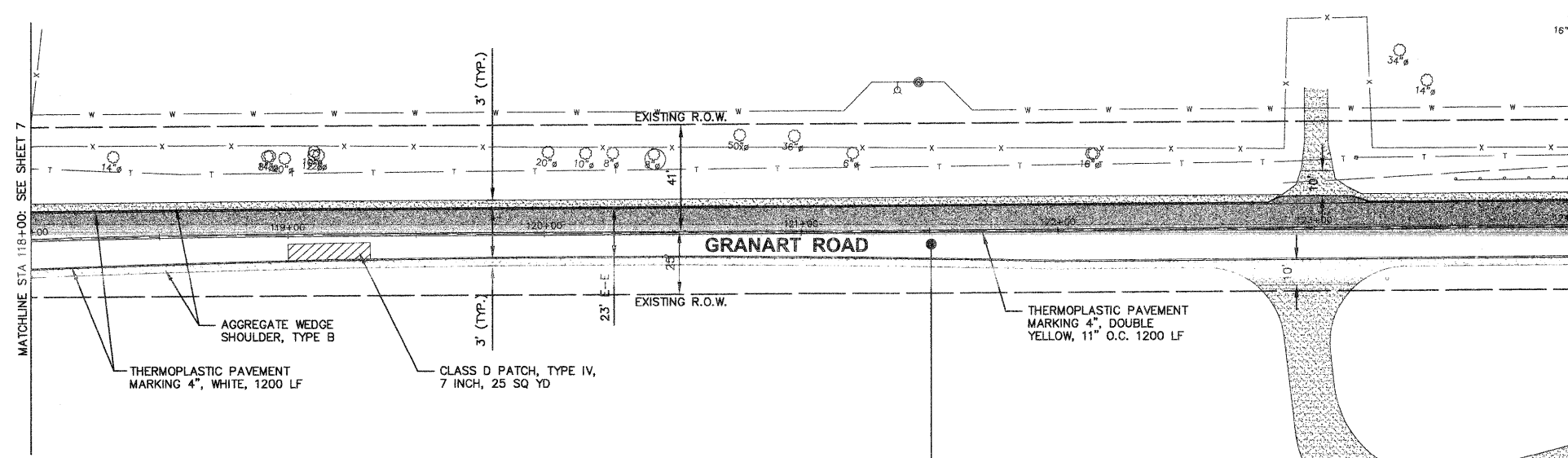
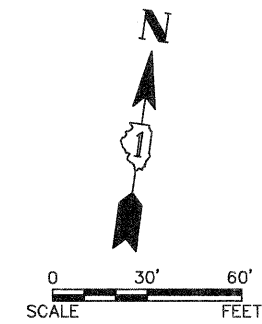
**GRANART ROAD**  
**LAPP IMPROVEMENTS**

**PLAN, CONSTRUCTION**  
**NOTES, AND DETAILS**

DATE:	JUNE 2010
PROJECT NO:	SG1012
FILE:	SG1012-PLAN
SHEET	<b>7</b> OF <b>13</b>

Path: H:\SG1012\DWG\SG1012.DWG FINAL ENG SG1012-PLAN

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3898	10-00024-00-RS	KANE	13	8
CONTRACT NO. 63499				



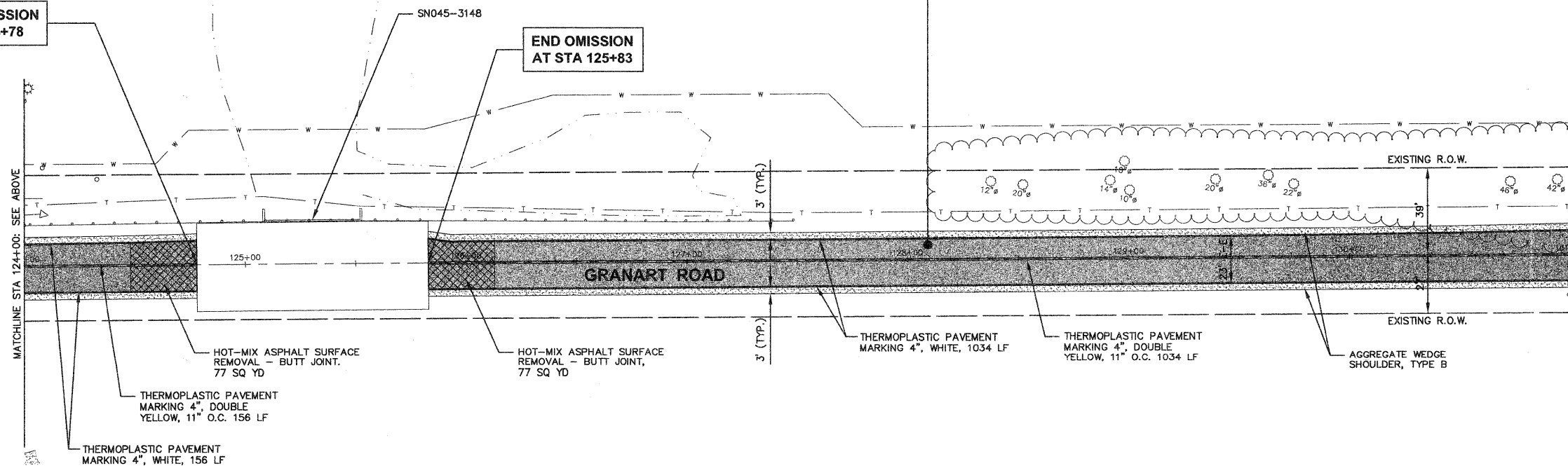
**LEGEND**

- HOT-MIX ASPHALT OVERLAY
- CLASS D PATCHES
- HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
- AGGREGATE WEDGE SHOULDER, TYPE B
- EXISTING GRAVEL DRIVEWAY

- HOT IN-PLACE RECYCLING, 2886 SQ YD
- BITUMINOUS MATERIALS (PRIME COAT), 289 GALLON
- AGGREGATE (PRIME COAT), 6 TONS
- LEVELING BINDER (MACHINE METHOD), N50, 1", 152 TONS
- HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50, 1.5", 243 TONS
- AGGREGATE WEDGE SHOULDER, TYPE B, 120 TON

BEGIN OMISSION AT STA 124+78

END OMISSION AT STA 125+83



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**VILLAGE OF SUGAR GROVE**  
 KANE COUNTY, ILLINOIS

NO.	DATE	REVISIONS

**GRANART ROAD**  
**LAPP IMPROVEMENTS**

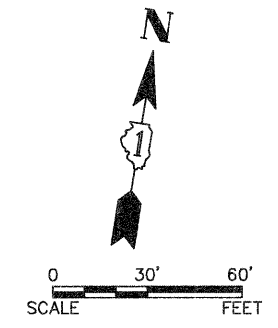
**PLAN, CONSTRUCTION**  
**NOTES, AND DETAILS**

DATE:	JUNE 2010
PROJECT NO.:	SG1012
FILE:	SG1012-PLAN
SHEET	<b>8</b> OF <b>13</b>

Path: H:\SS\KPROG\SG0307\DWG\SG1012\DWG FINAL ENG SG1012-PLAN

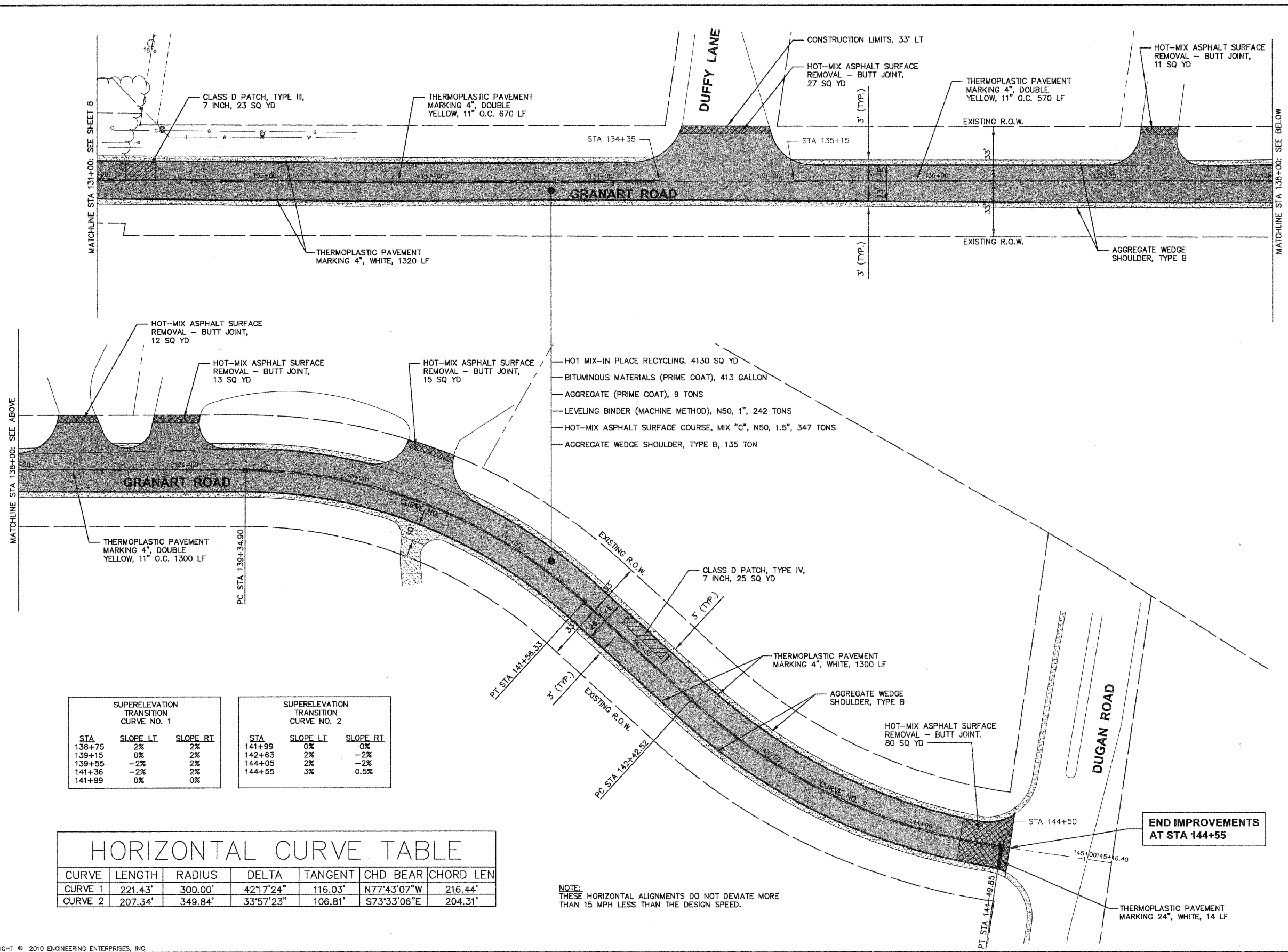


F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3898	10-00024-00-RS	KANE	13	9
CONTRACT NO. 63499				



**LEGEND**

- HOT-MIX ASPHALT OVERLAY
- CLASS D PATCHES
- HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
- AGGREGATE WEDGE SHOULDER, TYPE B
- EXISTING GRAVEL DRIVEWAY



SUPERELEVATION TRANSITION CURVE NO. 1			SUPERELEVATION TRANSITION CURVE NO. 2		
STA	SLOPE LI	SLOPE RI	STA	SLOPE LI	SLOPE RI
138+75	2%	2%	141+99	0%	0%
139+15	0%	2%	142+63	2%	-2%
139+55	-2%	2%	144+05	2%	-2%
141+36	-2%	2%	144+55	3%	0.5%
141+99	0%	0%			

CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHD BEAR	CHORD LEN
CURVE 1	221.43'	300.00'	42°17'24"	116.03'	N77°43'07"W	216.44'
CURVE 2	207.34'	349.84'	33°57'23"	106.81'	S73°33'06"E	204.31'

NOTE: THESE HORIZONTAL ALIGNMENTS DO NOT DEVIATE MORE THAN 15 MPH LESS THAN THE DESIGN SPEED.

Plotted: June 8, 2010 4:25 PM By: Larry Nolan - Tab: 09 Plan - 22x34

**Engineering Enterprises, Inc.**  
 CONSULTING ENGINEERS  
 52 Wheeler Road  
 Sugar Grove, Illinois 60554  
 630.466.6700 / www.eeiweb.com

**VILLAGE OF SUGAR GROVE**  
 KANE COUNTY, ILLINOIS

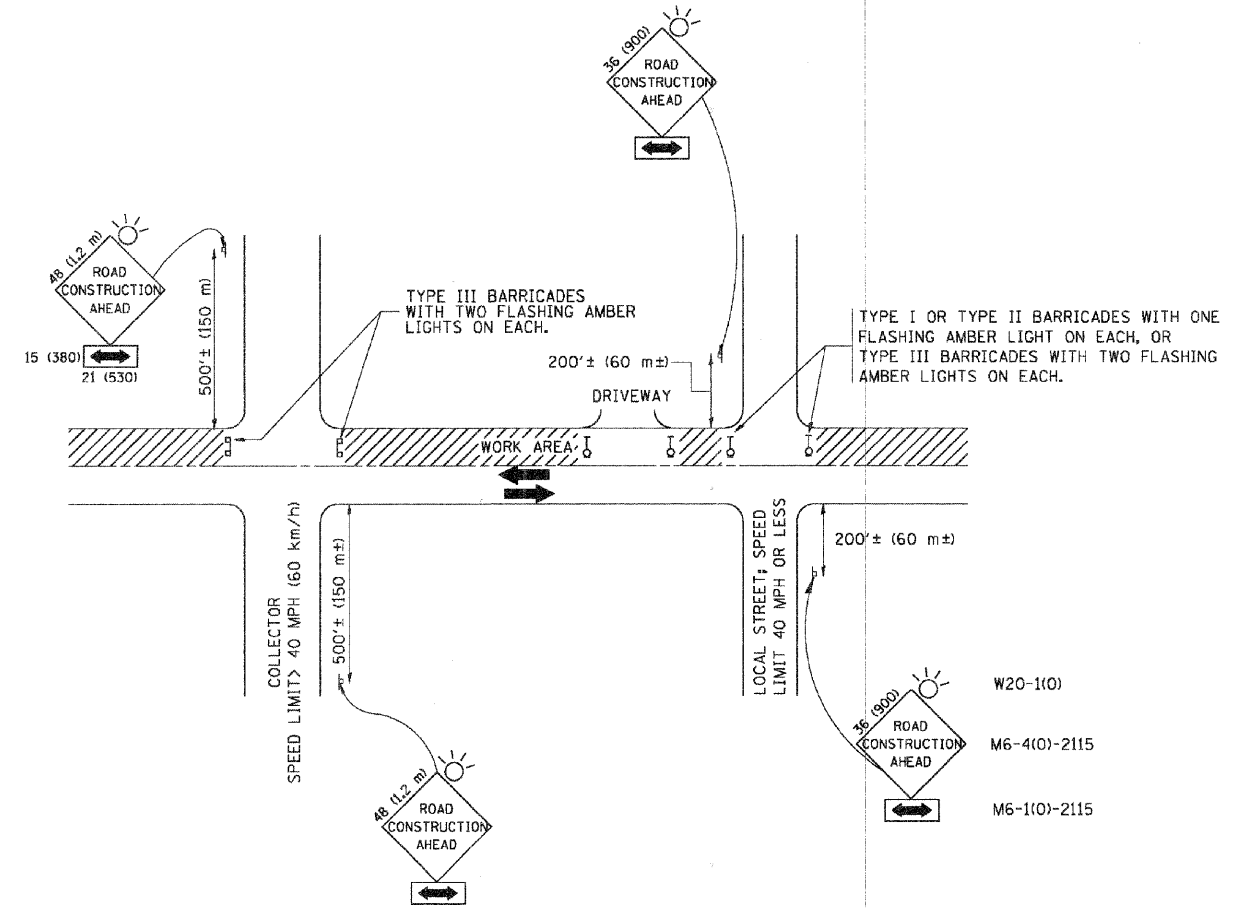
NO.	DATE	REVISIONS

**GRANART ROAD**  
**LAPP IMPROVEMENTS**

**PLAN, CONSTRUCTION**  
**NOTES, AND DETAILS**

DATE:	JUNE 2010
PROJECT NO:	SG1012
FILE:	SG1012-PLAN
SHEET	<b>9</b> OF <b>13</b>

P:\H:\SUGAR\SG1012\DWG\SG1012.DWG FINAL ENG SG1012-PLAN



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
  1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
    - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
  2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
    - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
 

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches) unless otherwise shown.

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PLOT SCALE = 50.000' / IN.	CHECKED -	DRAWN -	REVISED - A. HOUSEH 03-06-96
PLOT DATE = 1/4/2008	DATE - 06-89		REVISED - A. HOUSEH 10-15-96
			REVISED - T. RAMMACHER 01-06-00

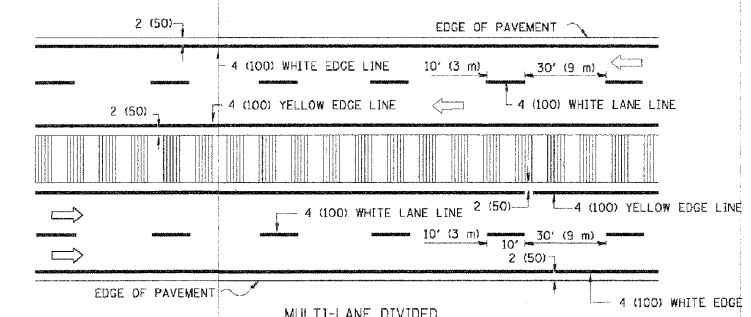
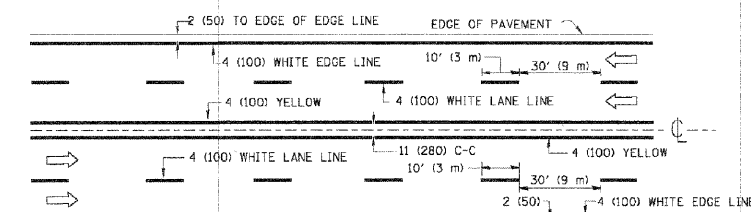
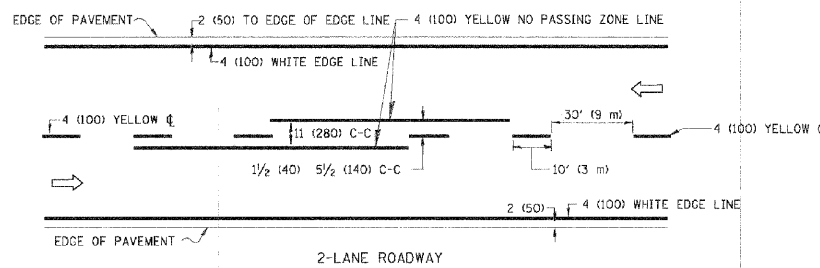
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-10			CONTRACT NO. 63499	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

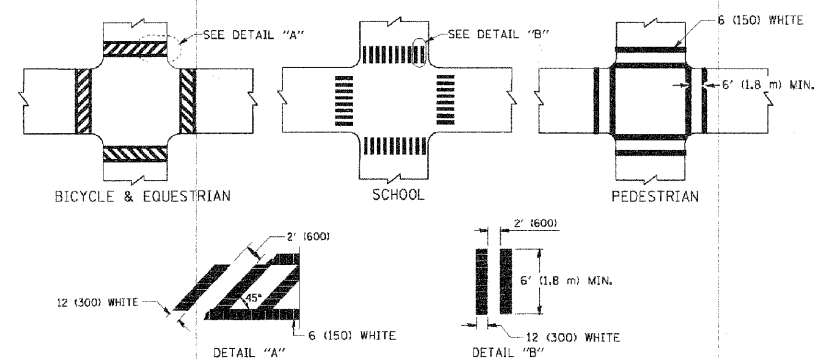
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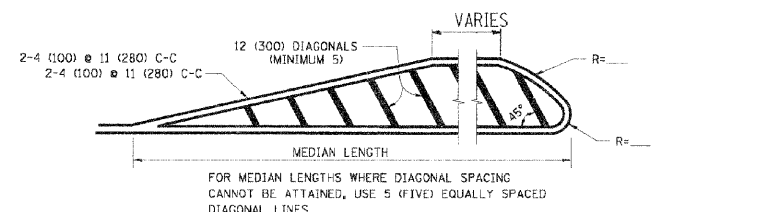
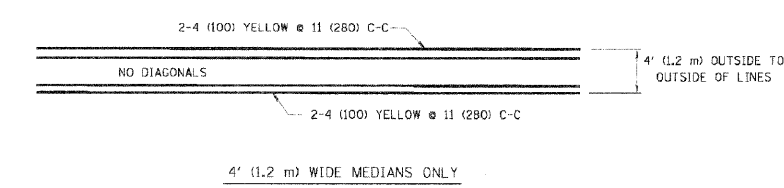


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

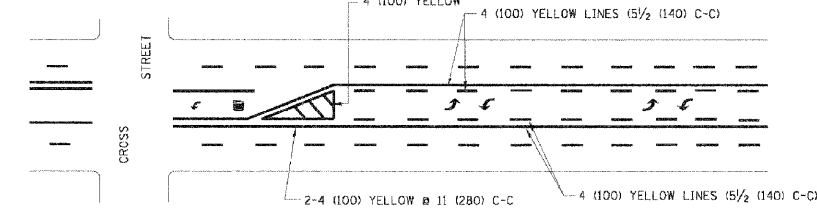


TYPICAL CROSSWALK MARKING



DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

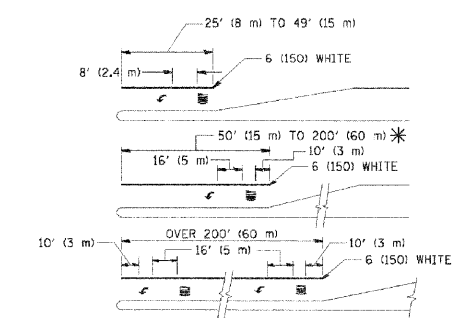
MEDIANS OVER 4' (1.2 m) WIDE



A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



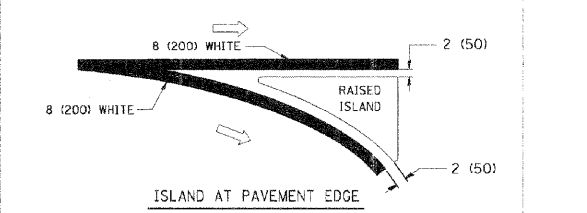
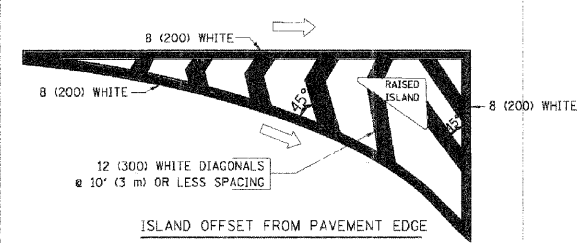
TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 5' (1.5 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (22.5 m) C-C 30 MPH (50 km/h) TO 45MPH (70 km/h) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

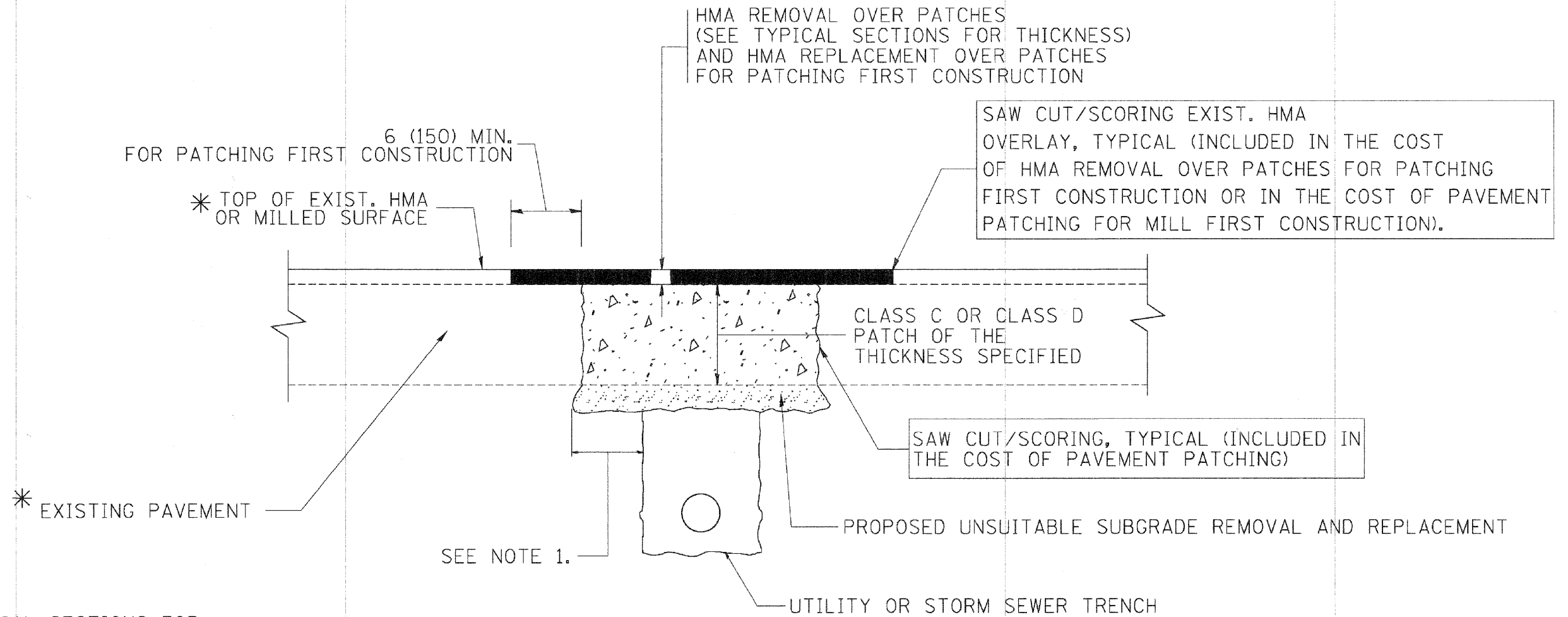
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = drsvakoagn	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
DRWN -	CHECKED -	DATE - 03-19-90	REVISED -
PLOT SCALE = 5/8" = 1' IN.			
PLOT DATE = 9/9/2009			

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE	
TYPICAL PAVEMENT MARKINGS	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3898	10-00084-00-RS	KANE	13	11
TC-13		CONTRACT NO. 63499		
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**NOTES:**

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

**SEQUENCE OF CONSTRUCTION (PATCHING FIRST)**

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

**SEQUENCE OF CONSTRUCTION (MILLING FIRST)**

1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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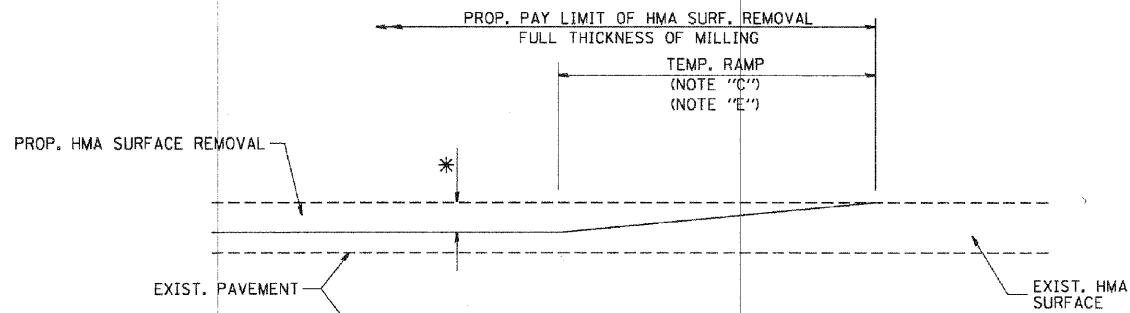
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	PLOT DATE = 12/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT PATCHING FOR  
HMA SURFACED PAVEMENT**

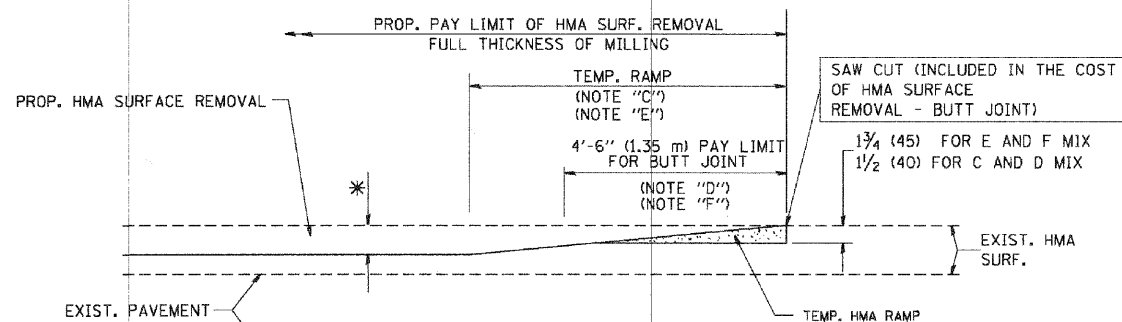
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3898	10-00024-00-RS	KANE	13	12
BD400-04 (BD-22)			CONTRACT NO. 63499	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



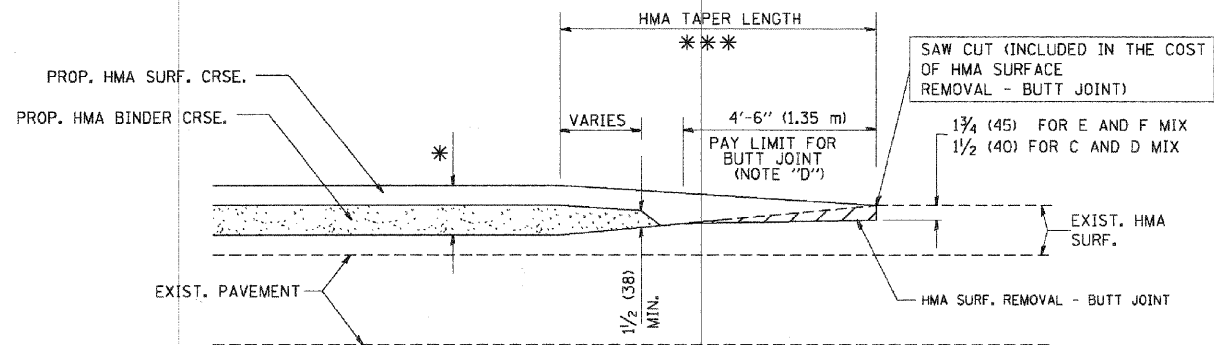
MILLED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 1**



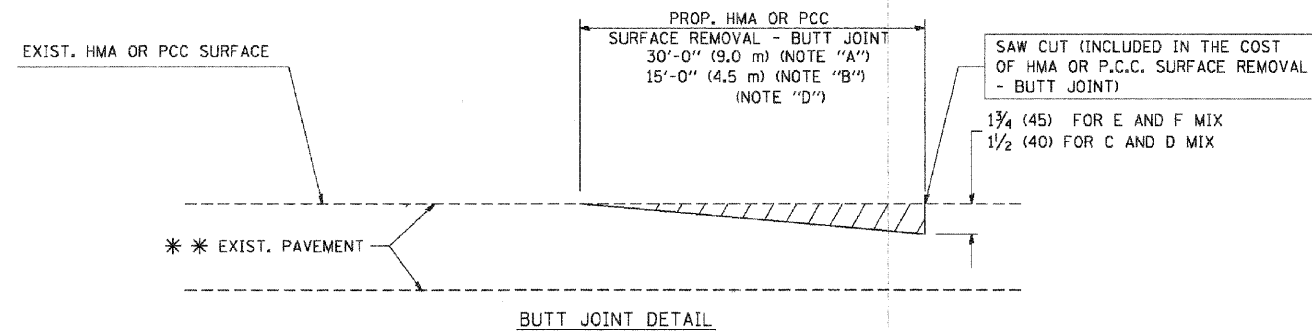
HMA CONSTRUCTED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 2**  
**TYPICAL TEMPORARY RAMP**

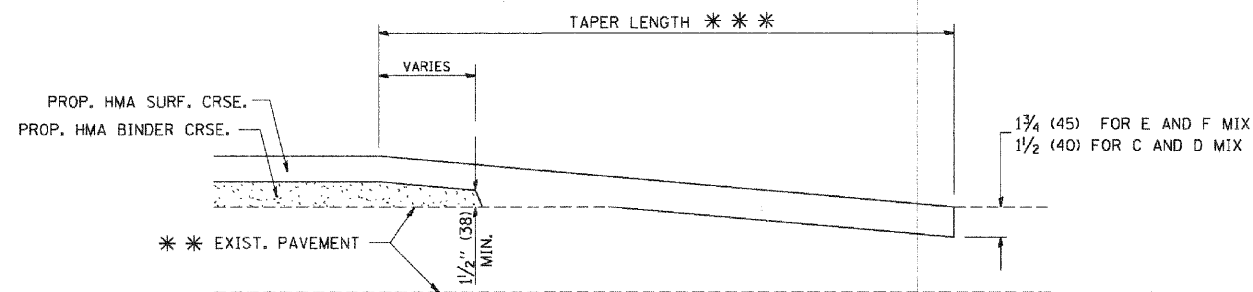


BUTT JOINT AND  
HMA TAPER

**TYPICAL BUTT JOINT AND HMA TAPER  
FOR MILLING AND RESURFACING**



BUTT JOINT DETAIL



HMA TAPER DETAIL

**TYPICAL BUTT JOINT AND HMA TAPER  
FOR RESURFACING ONLY**

\*\*\* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

**NOTES**

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
  - B: MINOR SIDE ROADS.
  - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
  - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
  - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
  - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
  - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- \*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")  
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

**BASIS OF PAYMENT:**

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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PLOT SCALE = 5/8" = 1' / IN.	CHECKED -	REVISOR - A. ABBAS 03-21-97	REVISED - M. GOMEZ 04-06-01
PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>BUTT JOINT AND HMA TAPER DETAILS</b>		F.A.U. RTE. 3888	SECTION 10-00024-00-R8	COUNTY KANE	TOTAL SHEETS 13	SHEET NO. 13
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	CONTRACT NO. 63499		
FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT						